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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,885	03/18/2004	Hubert Bellm	1140668-0061	8199

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WHITE & CASE LLP
PATENT DEPARTMENT
1155 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

EXAMINER

KASENGE, CHARLES R

ART UNIT PAPER NUMBER

2125

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/804,885

Applicant(s)

BELLM ET AL.

Examiner

Charles R. Kasenge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-23 and 25-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-23 and 25-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/22/05 have been fully considered but they are not persuasive. The Office reasserts that Hillman does disclose actual parameter values that are monitored (col. 4, lines 56-67 and col. 5, lines 45-58), determining at the computer at least one setpoint value (col. 1, lines 64-67 and 1-5; col. 5, lines 45-48), and monitoring values virtually in parallel with receiving input from an operator (col. 11, lines 10-33 and col. 21, lines 16-20). Regarding actual parameter values, Hillman states: "Controller 50 *maintains* the processing parameters (temperatures, pressures, motor speeds) at desired values (col. 4, lines 65-67)...", "The faster 80486 processor provides quicker response and enhances the *real time monitoring* of injection, timers and other parameters (col. 5, lines 56-58)" and "List box 1302 lists the names of the control parameters which are controlled and/or *monitored* by process controller 50 (col. 10, lines 2-4)." The Office contends that Hillman gives no indication that the aforementioned monitored parameters are not actual parameter values.

Regarding determining setpoint values, Hillman states: "The process controller(s) *determines* the sequence of activities performed to construct a container, temperature *setpoints*, data acquisition and injection parameters (col. 1 and 2, lines 66-67 and 1-2)." The Office asserts that this statement demonstrates determining at the computer at least one setpoint value. Furthermore, the Examiner would like to note that since the Applicant's claim language states "determining at least one setpoint value", the claim is not limited to the determining/calculating being done by a computer. An operator determining a setpoint value and entering it in the computer reads on Applicant's claimed limitation.

Regarding monitoring values virtually in parallel with receiving input from an operator, it is first noted that the Office interprets virtually in parallel to mean “substantially at the same time”. Hillman states: “Each processor 708 and 710 includes a respective monitor 712 and 714 for displaying data and for receiving operator inputs (col. 21, lines 16-18).” The Office interprets this phrase as reading on Applicant’s limitation, since it is common for a computer program to perform two functions at substantially the same time. Hillman also explicitly discloses the operator “interacting” with the program (col. 11, lines 31-33) while it is monitoring values (Fig. 17 and col. 11, lines 11-15).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11-23 and 25-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Hillman et al. U.S. Patent 5,470,218. Referring to claim 11, Hillman discloses a method for monitoring a control for an injection-molding process (abstract), the method comprising the steps of: (a) acquiring, using the control, actual values of at least one process variable of the injection-molding process, the actual values of the at least one process variable comprising at least one selected from the group consisting of temperature, pressure, feed rate, and rotational speed (col. 4, lines 56-67 and 1-7); and (b) transmitting the actual values of the at least one process variable to a computer for monitoring the control (col. 5, lines 45-58).

Referring to claims 11-14, Hillman discloses the method according to claim 10, further comprising the steps of evaluating the transmitted actual values with the computer, determining at least one setpoint value, and transmitting the at least one setpoint value to the control (col. 7, lines 18-34). Hillman discloses the method according to claim 10, further comprising the step of receiving at the computer at least one input from an operator and sending the received at least one input to the control virtually in parallel with the execution of the monitoring of the injection-molding process (col. 11, lines 1-9). Hillman discloses the method according to claim 10, further comprising the step of receiving at the computer at least one output from the control and sending the received at least one output to an operator virtually in parallel with the execution of the monitoring of an injection-molding process (col. 12, lines 12-18). Hillman discloses the method according to claim 12, wherein receiving and sending the at least one input is executed by the computer under an operating system comprising non-real-time capabilities (col. 11, lines 1-9).

Referring to claims 15-17, Hillman discloses the method according to claim 13, wherein receiving and sending the at least one output is executed by the computer under an operating system comprising non-real-time capabilities (col. 12, lines 12-18). Hillman discloses the method according to claim 10, wherein the control comprises a software process, the software process executed by the computer under an operating system comprising real-time capability (col. 4 and 5, lines 56-67 and 1-7), the software process executing virtually in parallel with transmitting the actual values acquired by the control to the computer for monitoring (col. 5, lines 45-58 and col. 18, lines 31-44). Hillman discloses the method according to claim 10, wherein the monitoring is carried out using a computer program, the computer program executed on the computer (col. 5, lines 45-58).

Referring to claim 18, Hillman discloses a system for controlling an injection-molding machine having an operator and comprising a plurality of sensors for transmitting values associated with an injection-molding process (col. 4, lines 31-45), the system comprising: (a) a control for the injection-molding machine in communication with the plurality of sensors, the control having at least one input and at least one output, the transmitted values associated with the injection-molding process and received by the at least one input (col. 11, lines 1-9 and col. 12, lines 12-18); and (b) a computer in communication with the control and receiving the transmitted values associated with the injection-molding process from the at least one output associated with the control, wherein the computer monitors the received values associated with the injection-molding process virtually in parallel with receiving at least one input from the operator (col. 21, lines 8-24 and 51-61).

Referring to claims 19-23, Hilliam discloses the system according to claim 18, wherein the at least one input receives the transmitted values in real time, and wherein the computer receives the transmitted values from the at least one output in real time (col. 18, lines 31-44). Hilliam discloses the system according to claim 18, wherein the computer is configured for receiving at least one operator input and for passing the at least one operator input to the control (col. 21, lines 8-24). Hilliam discloses the system according to claim 18, wherein the computer comprises a first computer program for monitoring the received values associated with the injection-molding process and a second computer program for sending at least one output received from the control to the operator, and wherein the second computer program sends at least one input received from the operator to the control (col. 21, lines 8-24 and 51-61). Hilliam discloses the system according to claim 21, wherein at least one of the first computer program

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and the second computer program run on a non-real-time operating system (col. 21, lines 51-61).

Hilliam discloses the system according to claim 18, wherein the control comprises a real-time operating system (col. 18, lines 31-44).

Referring to claims 25-26, Hilliam discloses a computer for controlling and monitoring an injection-molding machine having associated therewith a plurality of sensors for transmitting values of process variables associated with an injection-molding process (col. 4, lines 31-45), the computer comprising: (a) a first computer program for executing a software process for controlling the injection-molding process (col. 21, lines 8-24); and (b) a second computer program for executing a monitoring procedure based on the transmitted values associated with the injection-molding process (col. 21, lines 51-61). Hilliam discloses the computer according to claim 24, wherein the monitoring procedure and the software process are executed in parallel (col. 18, lines 31-44). Hilliam discloses the computer according to claim 24, wherein the computer has an operator, the computer further comprising a third computer program for sending at least one input received from the operator to the first computer program executing the software process (col. 21, lines 8-32).

Referring to claims 27-30, Hilliam discloses the computer according to claim 24, wherein the computer has an operator, the computer further comprising a third computer program for receiving from the first computer program at least one output for the operator (col. 21, lines 51-61). Hilliam discloses the computer according to claim 24, wherein the first and second computer programs are executed under an operating system having real-time capability (col. 18, lines 31-44). Hilliam discloses the computer according to claim 24, wherein the process variables associated with the injection-molding process comprise at least one of the group

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consisting of temperature, pressure, speed, and feed rate (col. 4 and 5, lines 56-67 and 1-7).

Hilliam discloses the computer according to claim 24, further comprising stored setpoint values, wherein the setpoint values comprise at least one of the group consisting of temperature variations, pressure variations, and feed rate variations (col. 4 and 5, lines 56-67 and 1-7).

Referring to claims 31-33, Hilliam discloses a method of monitoring an injection-molding process associated with an injection-molding machine by utilizing a control, the control in communication with a plurality of sensors (col. 4, lines 31-45), the method comprising the steps of: (a) executing a monitoring procedure based on receiving data from the plurality of sensors (col. 4, lines 31-45); and (b) receiving at the control virtually in parallel to executing the monitoring procedure at least one input from an operator (col. 21, lines 8-24). Hilliam discloses the method according to claim 31, wherein the monitoring procedure is carried out by a computer associated with the control (col. 5, lines 45-58). Hilliam discloses the method according to claim 31, further comprising the step of: (c) sending at least one output from the control to the operator virtually in parallel to executing the monitoring procedure (col. 21, lines 51-61).

Referring to claims 34-37, Hilliam discloses the method according to claim 31, wherein the at least one first input from the plurality of sensors comprises at least one of the group consisting of temperature, pressure, speed, and feed rate (col. 4 and 5, lines 56-67 and 1-7). Hilliam discloses the method according to claim 31, wherein the monitoring procedure further comprises evaluating the received at least one first input from the plurality of sensors and determining at least one setpoint value based on the received at least one first input from the plurality of sensors (col. 4, lines 31-45). Hilliam discloses the method according to claim 31, wherein the determined at least one set point value is sent to the control (col. 5, lines 45-58).

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Hilliam discloses the method according to claim 36, wherein the at least one set point value comprises at least one of the group consisting of temperature variations, pressure variations, and feed rate variations (col. 4 and 5, lines 56-67 and 1-7).

Referring to claims 38 and 39, Hilliam discloses a control system for an injection-molding machine, the control comprising: (a) a plurality of sensors for sensing and transmitting values associated with the injection-molding process; (b) a control in communication with the plurality of sensors; and (c) a computer in communication with the control, wherein the transmitted values associated with the plurality of sensors are shared by both the control and the computer (col. 4, lines 31-65). Hilliam discloses the system according to claim 38, wherein the plurality of sensors are not dedicated solely for use with the computer (col. 4, lines 31-45).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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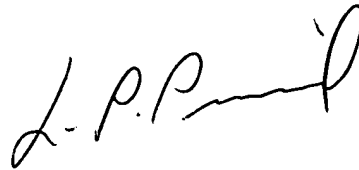
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R. Kasenge whose telephone number is 571 272-3743.

The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CK
November 1, 2005

A handwritten signature in black ink, appearing to read "L. Picard", with a stylized flourish at the end.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100